

REMARKS

Applicants have amended claims 1 and 3 in order to more particularly define the invention and to add new claims 11-17.

Reconsideration of the application is respectfully requested for the following reasons:

Rejection of claims 1-6 under 35 U.S.C. 103(a) as being unpatentable over Machol (U.S. 5,719,705) in view of Spoko et al. (U.S. 6,436,541)

This rejection is respectfully traversed in view of the following comments:

The invention of the subject patent application as defined in amended claim 1, relates to a combined anti-reflective and anti-static structure for a display device, comprising a glass substrate, an ITO layer, a first Nb₂O₅ layer, a first SiO₂ layer, a second Nb₂O₅ layer, a second SiO₂ layer successively formed in that order on the glass substrate wherein the first Nb₂O₅ layer functions as an adhesive layer to increase adhesion strength between the ITO layer and the first SiO₂ layer. The first Nb₂O₅ layer should have a thickness not exceeding 5 nm and preferably in a range of from 3 nm to 5 nm in order to satisfy both requirements of anti-reflectivity and adhesion strength. When the thickness of the first Nb₂O₅ layer is greater than 5 nm, the anti-reflective characteristic of the structure deteriorates.

In contrast, Machol discloses a multilayer film which includes a first layer having a high refractive index, a second layer having a low refractive index, a third layer having a high refractive index and a fourth layer having a low refractive index. This 4-layered structure of Machol is disclosed as prior art in "Background of the Invention" of the present application. However, the present invention adds a first Nb_2O_5 layer not taught in the 4-layered structure of Machol. According to the disclosure of Machol, the Nb_2O_5 layer functions as a high refractive index layer and is not present between the ITO layer and the first SiO_2 layer. Accordingly, it cannot function as an adhesive layer to increase adhesion strength between the ITO layer and the SiO_2 layer. Moreover, Machol does not teach having a Nb_2O_5 layer for use in the multilayer film having a thickness which satisfies the thickness of the first Nb_2O_5 layer of the present invention as claimed in claim 3.

The Spoko et al. reference discloses a coated article which includes a substrate, a first layer and a second layer. The first and second layers are transparent conductive oxides. The refraction index of the second layer is less than that of the first layer. Spoko et al. does not disclose an Nb_2O_5 layer which serves as an adhesive layer for placement between an ITO layer and an SiO_2 layer.

Therefore, the cited references neither disclose nor suggest an Nb_2O_5 layer as an adhesive layer to increase the adhesion strength between an ITO layer and an SiO_2 layer. Accordingly, it is respectfully submitted that the rejection of claim

1 as being obvious over the cited references is without support and should be withdrawn.

Claims 2-6 directly depending on claim 1 and are allowable for the same reasons as indicated above with respect to claim 1. Moreover, the additional features recited in claims 2-6 are not taught in the cited references when taken alone and/or in combination.

Rejection of claims 7-10 under 35 U.S.C. 103(a) as being unpatentable over Machol (U.S. 5,719,705) in view of Spoko et al. (U.S. 6,436,541) and further in view of Hirai et al. (U.S. 5,424,008)

Claims 7-10 are dependent claims which are believed patentable for the same reasons as given above, as well as for the following additional reasons:

The Examiner states that Hirai et al. discloses a glass substrate coated with antistatic/antiglare layers. The glass substrate has a surface roughness which markedly improves the adhesion between the coating and the substrate. However, Hirai et al. does not disclose the surface roughness as claimed in claims 7-10, respectively. The present invention claims a surface roughness in claim 8 having an average surface roughness of 6.14 Å and peak-to-valley surface roughness of 106 Å. More importantly, Hirai et al. does not teach using the Nb₂O₅ layer as an adhesive layer.

Since none of the prior art references cited by the Examiner disclose the above-mentioned features of claim 1 from which claim 7-10 are dependent, the rejection should be withdrawn. Moreover, the additional features recited in claim 7-10 are also not taught in Hirai et al.

New claims 11-17 include the requirement of an intermediate layer serving as an adhesive layer to increase adhesion strength between the high refractive index material and the first layer. No such layer is taught or suggested in the cited references.

CONCLUSION

Applicants believe that this is a full and complete response to the Office Action. For the reasons discussed above, applicants now respectfully submit that all of the pending claims are in complete condition for allowance. Accordingly, it is respectfully requested that the Examiner's rejections be withdrawn and that claims 1-17 be allowed in their present form.

Should the Examiner require or consider it advisable that the specification, claims an/or drawings be further amended or corrected in formal respects, in order to place the case in condition for final allowance, then it is respectfully requested that such amendment or correction be carried out by Examiner's Amendment, upon receipt of approval from the undersigned on behalf applicants, and the case be passed to issue.

Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned.

Respectfully submitted,
Associate Attorney for applicants

By:


Eugene Lieberstein
Registration No. 24,645

May 13, 2005

ANDERSON KILL & OLICK, P.C.
1251 Avenue of the Americas
New York, New York 10020-1182

MAILING CERTIFICATE

I hereby certify that this AMENDMENT is being deposited with the U.S. Postal Service as first class mail in an envelope addressed: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on May 13, 2005.


Audrey de Souza